

```
PS C:\Program Files\Docker\Docker> docker pull ubuntu:16.04
16.04: Pulling from library/ubuntu
Digest: sha256:9775877f420d453ef790e6832d77630a49b32a92b7bedf330adf4d8669f6600e
Status: Image is up to date for ubuntu:16.04
docker.io/library/ubuntu:16.04
PS C:\Program Files\Docker\Docker> █
```

1. Double checking that we still have ubuntu 16.04 from last session with docker pull

```
PS C:\Program Files\Docker\Docker> docker run -it ubuntu:16.04 /bin/bash
root@0ba72f557dfc:/# ping google.com
bash: ping: command not found
root@0ba72f557dfc:/#
```

2. Tried pinging google after running docker run

```
root@0ba72f557dfc:/# apt-get update
Get:1 http://archive.ubuntu.com/ubuntu xenial InRelease [247 kB]
Get:2 http://security.ubuntu.com/ubuntu xenial-security InRelease [109 kB]
Get:3 http://security.ubuntu.com/ubuntu xenial-security/main amd64 Packages [2051 kB]
Get:4 http://archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Get:5 http://archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Get:6 http://archive.ubuntu.com/ubuntu xenial/main amd64 Packages [1558 kB]
Get:7 http://archive.ubuntu.com/ubuntu xenial/restricted amd64 Packages [14.1 kB]
Get:8 http://archive.ubuntu.com/ubuntu xenial/universe amd64 Packages [9827 kB]
Get:9 http://archive.ubuntu.com/ubuntu xenial/multiverse amd64 Packages [176 kB]
Get:10 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [2559 kB]
Get:11 http://archive.ubuntu.com/ubuntu xenial-updates/restricted amd64 Packages [16.4 kB]
Get:12 http://archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [1544 kB]
Get:13 http://archive.ubuntu.com/ubuntu xenial-updates/multiverse amd64 Packages [26.2 kB]
Get:14 http://archive.ubuntu.com/ubuntu xenial-backports/main amd64 Packages [10.9 kB]
Get:15 http://archive.ubuntu.com/ubuntu xenial-backports/universe amd64 Packages [12.7 kB]
Get:16 http://security.ubuntu.com/ubuntu xenial-security/restricted amd64 Packages [15.9 kB]
Get:17 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [984 kB]
Get:18 http://security.ubuntu.com/ubuntu xenial-security/multiverse amd64 Packages [8820 B]
Fetched 19.4 MB in 16s (1186 kB/s)
Reading package lists... Done
root@0ba72f557dfc:/# █
```

3. Updating software list

```

root@0ba72f557dfc:/# apt-get install iputils-ping
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libffi6 libgmp10 libgnutls-openssl27 libgnutls30 libhogweed4 libidn11 libnettle6
  libp11-kit0 libtasn1-6
Suggested packages:
  gnutls-bin
The following NEW packages will be installed:
  iputils-ping libffi6 libgmp10 libgnutls-openssl27 libgnutls30 libhogweed4 libidn11
  libnettle6 libp11-kit0 libtasn1-6
0 upgraded, 10 newly installed, 0 to remove and 5 not upgraded.
Need to get 1307 kB of archives.
After this operation, 3781 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://archive.ubuntu.com/ubuntu xenial/main amd64 libgmp10 amd64 2:6.1.0+dfsg-2 [240 kB]
Get:2 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libnettle6 amd64 3.2-1ubuntu0
.16.04.2 [93.7 kB]
Get:3 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libhogweed4 amd64 3.2-1ubuntu
0.16.04.2 [51.2 kB]

```

4. Installing ping command (did not include whole screenshot as it was too long)

```

root@0ba72f557dfc:/# ping pornhub.com
PING pornhub.com (66.254.114.41) 56(84) bytes of data.
64 bytes from 66.254.114.41: icmp_seq=1 ttl=37 time=190 ms
64 bytes from 66.254.114.41: icmp_seq=2 ttl=37 time=156 ms
64 bytes from 66.254.114.41: icmp_seq=3 ttl=37 time=156 ms
64 bytes from 66.254.114.41: icmp_seq=4 ttl=37 time=155 ms
64 bytes from 66.254.114.41: icmp_seq=5 ttl=37 time=157 ms
64 bytes from 66.254.114.41: icmp_seq=6 ttl=37 time=156 ms
64 bytes from 66.254.114.41: icmp_seq=7 ttl=37 time=156 ms
64 bytes from 66.254.114.41: icmp_seq=8 ttl=37 time=157 ms

```

5. Pinging a website

```

PS C:\Program Files\Docker\Docker> docker ps -a
CONTAINER ID   IMAGE             COMMAND                  CREATED        STATUS
PORTS         NAMES
0ba72f557dfc   ubuntu:16.04     "/bin/bash"             16 minutes ago Exited (130) 3 minutes ago
5a5f84766416   ubuntu:16.04     "/bin/bash"             36 seconds ago Exited (135) 15 seconds ago

```

6. Getting container ID

```

PS C:\Program Files\Docker\Docker> docker commit -a 'Brent Handsome' -m 'Added ping utility.' 0ba bha/ping
sha256:9100e16a4ebac597fd9e47818a6b071ca30c4a224cda013ed7181327c8a17eb9

```

```

PS C:\Program Files\Docker\Docker> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
bha/ping      latest   9100e16a4eba   About a minute ago   170MB
ubuntu        16.04    9ff95a467e45   3 weeks ago       135MB
PS C:\Program Files\Docker\Docker>

```

7. Committing image

```
PS C:\Program Files\Docker\Docker> docker run -it --rm bha/ping bin/bash
root@c978478529ce:/# ping reddit.com
PING reddit.com (151.101.193.140) 56(84) bytes of data.
^C64 bytes from 151.101.193.140: icmp_seq=1 ttl=37 time=49.7 ms

--- reddit.com ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 49.775/49.775/49.775/0.000 ms
root@c978478529ce:/# exit
exit
PS C:\Program Files\Docker\Docker>
```

8. Running our new image